Off-site construction practices have become increasingly common as a strategy for addressing the challenges of sustainability, affordability, and quality within the building industry. In order to provide more clarity and encourage increased uptake of this construction process, the ICC/MBI 1205-2021 Standard for Off-site Construction was released in a collaborative effort between the International Code Council (ICC) and the Modular Building Institute (MBI) in September 2021.

Adoption of the 1205 Standard will provide clarity around which jurisdictions currently employ off-site construction and may further support additional jurisdictions in expanding off-site methods. This one-pager discusses the new model language, which covers the roles of code officials and third-party inspectors, and clarifies how the new standard applies in the context of existing state and local enforcement programs.

A Case Study
Salt Lake City, Utah is the first jurisdiction to adopt the 1205 Standard and has since been commended for addressing housing and infrastructure needs and barriers. The biggest promise of the new ICC/MBI 1205-2021 Standard is nationally consistent language for regulations. In particular, the Standard will assist states that currently leave off-site construction oversight to local authorities in establishing requirements that will improve conditions for AHJs, code officials, fabricators, and builders.

A Closer Look
The lack of a national standard for off-site construction resulted in obstacles to uptake of the construction method. Even basic definitions lacked consistency. Requirements for approval, permitting, and inspection of off-site construction varied across states, and a number of states had no state-wide regulations for off-site construction.

As a result of the lack of a national model standard, ICC/MBI developed two standards – the 1200-2021 Standard and the 1205-2021 Standard. The first addresses planning, design, fabrication, and assembly, and the second addresses regulatory compliance and inspection. The 2010-202x Standard, which is still under development, will address energy efficiency and water conservation.
**State and Local Level Regulation**

Authorities having jurisdiction (AHJs), which may operate at the state or local level, are recognized as the entities responsible for administration and enforcement of applicable building codes. Some states mandate codes that local jurisdiction must then enforce, and other states establish a minimum code level that local jurisdictions must meet or exceed. Alternatively, some local jurisdictions adopt their own codes and are not regulated by the state.

In approximately two-thirds of states, off-site construction is regulated at the state level. In this case, AHJs are responsible for all aspects of the project, both on-site and the off-site construction, but must act according to state requirements. In remaining states, AHJs are fully responsible for regulation of on-site and off-site elements, but may not have much experience with this method of construction and may be using codes developed for on-site construction. Sometimes the off-site factory is located outside of the AHJ jurisdiction, further complicating matters.

When there are variations between the codes at the fabrication site and the construction site, confusion may occur. Additionally, off-site manufacturers may be fabricating products for use in multiple jurisdictions, each with their own requirements. Since separate fabrication and building site locations are inherent in off-site construction, it is important to refer to the 1205 standard which specifies that inspections must occur before parts are sealed up, meaning that they also require off-site inspections.

**Third Party Inspection and Remote Virtual Inspections**

Third-party inspection agencies are independent (not involved in design, fabrication, construction) qualified companies that provide impartial inspection services. Third-party inspectors can conduct inspections outside of a potentially limited geographic jurisdiction while still being subject to the oversight of AHJs. Third-party inspectors can also be useful in cases where code official staff levels are low and travel times are long.

Remote virtual inspections (RVI) are inspections conducted remotely through use of video cameras and still photographs. Contractors/fabricators and code officials/third-party inspectors communicate in real time through video networking software. Drone technology may also be used for difficult- or dangerous-to-access areas, though privacy and search laws may be an issue.

Given separate sites for fabrication and construction, using both RVIs and third-party inspectors allows necessary building inspections to occur in an increasingly efficient manner. Standards for the deployment, quality assurance, and performance evaluation of third-party inspectors are clarified in the ICC/MBI 1205 Standard. Requirements and specifications such as labeling requirements are also provided. Should AHJs decide to utilize RVIs, there are also standards for plan approvals and inspection procedures.
Conclusion

Off-site construction provides an effective solution to the challenges of delivering affordable, code compliant residential and commercial buildings to communities. As a result, the standards and requirements in the ICC/MBI 1205 Standard offer consistent definitions and requirements to assist jurisdictions in addressing their need for regulatory compliance and inspection practices.

Off-site construction can be used to address the increasing costs of housing, the current lack of skilled labor, and ongoing environmental concerns. Innovative deployment of RVIs and third-party inspections can help facilitate more off-site construction projects.